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GRAY DAVIS
Governor

August 15, 2002

**VENDOR INFORMATION
CALIFORNIA ELAP PERFORMANCE EVALUATION STUDY PROGRAM
WATER SUPPLY (WS) AND WATER POLLUTION (WP) STUDY SERIES
MICROBIOLOGY**

California State Environmental Laboratory Accreditation Program (ELAP) had directed its laboratories to participate in microbiology studies provided by several vendors. Detailed information is provided to each vendor in this communication. Please, review the following details and if you have questions, please contact Fred Choske:

1. The vendor must be in compliance with NIST handbook 150, NIST handbook 150-19, and USEPA Criteria Document (December 1998). This is inclusive of the manufacture/preparation of the PE study samples as well as other functions expected of the vendor for such studies.
2. Laboratories are permitted to report multiple analyte (E.Coli, Fecal) results from the same wastewater enumeration sample. For this reason laboratories have been instructed to make copies of the blank report forms to facilitate such reporting to the vendor of choice.
3. If a laboratory wishes to participate in a study for quality control purposes only and requests that ELAP not receive a copy of the report, such a request must be made prior to participation in the study. To avoid confusion, such laboratories have been recommended to order blind quality control samples, which are not part of on-going performance evaluation studies.



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www.consumerenergycenter.org/flex/index.html

Environmental Laboratory Accreditation Program
1625 Shattuck Avenue, Room 101, Berkeley, CA, 94709-1611
510/ 540-2800, fax 510/849-5106
Internet Address: www.dhs.ca.gov/ps/lis/elap/Elapindex.htm

4. The method description for each laboratory's reported result is necessary for ELAP review. In order to make uniform the method descriptions and to allow differentiation between methods employed by laboratories for routine sample analyses, a set of short-handed descriptions have been established for use, as depicted in the enclosed tables. From August 2002, laboratories will be using these short-handed descriptions in reporting their results to the vendors. Vendors are encouraged to use the short-handed descriptions as provided, so ELAP can use the descriptions for assessment of the laboratories. Your cooperation is greatly appreciated.
5. If a laboratory certified by the State of California cannot remember its EPA ID number or has questions about the ID number, please have the laboratory contact Fred Choske at (510) 540-2800.
6. If a laboratory did not report results for all 10 samples, notation of "not reported" should appear in the evaluation for the analyte. If an analyte or sample is invalidated for any reason, the evaluation report should contain the laboratory-reported results and the evaluation of "not evaluated" for the analyte(s) affected, so that the reader of the report would know that the laboratory did analyze the sample.
7. Evaluation reports shall be provided to the laboratory by the vendor within 21 days of the study completion date. Copies of these reports are expected to be sent to ELAP to the attention of Fred Choske (at the California State Department of Health Services, Environmental Laboratory Accreditation Program, 1625 Shattuck Avenue, Room 101, Berkeley, CA 94709-1611) within the similar time frame. Faxed copies and E-mailed copies of the evaluation reports are not accepted.
8. The evaluation report for the drinking water microbiology studies (presence/absence), provided to the laboratory, must have the following minimum information
 - study type and date (date of study evaluation)
 - study date (commencement and conclusion) study number
 - vendor's name, NIST accreditation number, location, telephone, fax
 - laboratory's (participant) complete name and address
 - if mobile, license number, vehicle identification number
 - EPA laboratory ID number
 - name and title of laboratory official who approved the data on the report
 - series identifier for each analyte
 - analyte name, analyte code
 - sample number
 - method of analyses, method code
 - reported value
 - assigned value
 - evaluation of the sample

Please note, ELAP prefers to evaluate its own laboratories. Please do not supply the "evaluation for the analyte (based on evaluation of 10 samples)" on the individual laboratory report.

9. The evaluation report to the laboratory for HPC, drinking water source or wastewater microbiology methods (which involve enumeration), should be similar to the WPCHEM reports described in the USEPA Criteria Document (Dec. 1998), and must have the following minimum information

study type and date (date of study evaluation)
study date (commencement and conclusion)
study number
vendor's name, NIST accreditation number, location, telephone, fax
laboratory's (participant) complete name and address
if mobile, license number, vehicle identification number
EPA laboratory ID number
name and title of laboratory official who approved the data on the report
analyte name, analyte code
lot number
method of analyses, method code
</> field
reported value
assigned value
acceptance limits
evaluation

Please note, warning limits are not used in microbiology performance evaluation stugi@IL
Please omit them.

10 **Electronically Transmitted Evaluation Reports:**

- a) At the completion of a study, electronically transmitted evaluation report(s) in ASCII, comma delimited format as described in the U.S. Environmental Protection Agency Criteria Document of December 1998, on 3.5-inch diskettes must be mailed to Fred Choske with the hard copies of the evaluation reports, at the California State Department of Health Services, Environmental Laboratory Accreditation Program, 1625 Shattuck Avenue, Room 101, Berkeley, CA 94709-1611. (The fields for the electronic form of the evaluation report(s) must meet the requirements described in the U.S. Environmental Protection Agency Criteria Document of December 1998. The only identification of the participant laboratory in the electronic form of the evaluation report must be the EPA laboratory code which is the "participant identifier" in the U.S. Environmental Protection Agency Criteria Document of December 1998.) In addition to the fields described in the U.S. Environmental Protection Agency Criteria Document of December 1998, fields designating the commencement and conclusion of the study are required: study commencement date field identifier "date1" with MM/DD/YYYY entry format; study conclusion date field identifier "date2" with MM/DD/YYYY entry format. (The study commencement would be the date the first shipment of study samples is mailed out to the laboratories. The study conclusion would be the date of study closure.)

- b) Vendors providing samples for enumeration (for example HPC) should use the reporting format for WPCHEM as described in the USEPA Criteria Document (Dec 1998) for electronically transmitted performance evaluation study reports. "WPMICRO" should be used as the study type for samples that are being reported for wastewater enumeration.
- c) If a "greater than" or "less than" symbol (</>) is reported, it should be reported in the field" as described in the USEPA Criteria Document (Dec. 1998). The "reported value field" is a numeric field and should not contain non-numeric characters.
- d) The following four files are to be included in the electronic transmitted reports:
 - Initial Assigned Values File
 - Final Assigned Values File
 - Study Data File
 - Study Summary Results File
- e) The electronic information sent to California ELAP must include the USEPA laboratory ID number for each participating laboratory.
- f) Until the NELAC PT committee's analyte codes are accepted, the analyte codes that appear in the USEPA Criteria Document (Dec. 1998) shall be used.

Contact for specific and general questions from vendors should be directed to Fred Choske at (510) 540-██████ or Fax (510) 540-3141. In Fred's absence, the backup contact is Jane Jensen at (510) 540-██████.

The information contained in this letter and enclosures from California ELAP is for the vendor only and not to be shared with others.

Please contact Fred Choske at (510) 540-██████ if you have any questions. Your cooperation is greatly appreciated.

Sincerely,

George Kulasingam, Ph.D.
Program Chief

[Signed by FC]

Fred Choske
Environmental Laboratory Accreditation Program

Enclosure
Method Description Tables

MICROBIOLOGY PT STUDIES METHOD DESCRIPTIONS & ANALYTE CODES

(August 2002)

In order to make uniform the method descriptions and to allow differentiation between methods employed by laboratories for routine sample analyses, a set of short-handed descriptions have been established for use, as depicted in the tables below. Soon, laboratories will be using these short-handed descriptions in reporting their results to the vendors. Vendors are encouraged to use the short-handed descriptions as provided by the laboratories, so that the California State Environmental Laboratory Accreditation Program (ELAP) can use the descriptions for assessment of the laboratories. Your cooperation is greatly appreciated. In addition to the method descriptions are analyte codes (which are expected to be used in providing electronic data via diskettes to ELAP), and reference methods (which are those that appear in Federal regulations and are provided here for information purposes only).

METHOD DESCRIPTIONS & ANALYTE CODES MICROBIOLOGY (Table 1)

<u>Group of Analytes</u>	<u>ELAP/EPA Analyte Codes</u>	<u>NELAP Analyte Codes</u>	<u>Method Description*</u>	<u>Reference Method</u>
DRINKING WATER MATRIX				
<i>Multiple Tube Fermentation (or "Fermentation") Methods:</i>				
Total Coliform	0252	same	MTFLT B	SM9221A,B
Fecal Coliform	0253	same	MTFEC	SM9221E
<i>E.coli</i>	0253	same	MTFECMUG	CFR 141.21(f)(6)(i)
<hr/>				
<i>Clarks (or "P-A") Methods:</i>				
Total Coliform	0254	same	Clarks	SM9221D
Fecal Coliform	0255	same	ClarksEC	SM9221E
Fecal Coliform	0255	same	ClarksECMUG	CFR 141.21(f)(6)(i)
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<i>Membrane Filtration (or "Filtration") Methods:</i>				
Total Coliform	0250	same	MFmENDO	SM9222A,B,C
Fecal Coliform	0251	same	MFEC	SM9221E
<i>E.coli</i>	0251	same	MFECMUG	CFR 141.21(f)(6)(i)
<i>E.coli</i>	0251	same	MFNAMUG	CFR 141.21(f)(6)(ii)

<u>Group of Analytes</u>	<u>ELAP/EPA Analyte Codes</u>	<u>NELAP Analyte Codes</u>	<u>Method Description*</u>	<u>Reference Method</u>
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DRINKING WATER MATRIX (continued)

"Chromogenic-Fluorogenic" Methods Involving Membrane Filtration:

Total Coliform	0250	same	MI	EPA/600/J-99/225
<i>E.coli</i>	0251	same	MI	EPA/600/J-99/225

Total Coliform	0250	same	mColiBlue24	Hach ¹
<i>E.coli</i>	0251	same	mColiBlue24	Hach ¹

"Chromogenic-Fluorogenic" Methods Involving Single or Multiple Tube Processes:

Total Coliform	0256	same	Colilert	SM9223
<i>E.coli</i>	0257	same	Colilert	SM9223
Total Coliform	0256	same	Colilert18	SM9223
<i>E.coli</i>	0257	same	Colilert18	SM9223

Total Coliform	0256	same	Colisure	Idexx ²
<i>E.coli</i>	0257	same	Colisure	Idexx ²

Total Coliform	0256	same	EColite	Charm ³
<i>E.coli</i>	0257	same	EColite	Charm ³

Notations:

The method descriptions must not contain spaces, hyphens, slashes, or commas.

1. Appears in the Code of Federal Regulations, volume 40, part 141.21(f)(6)(vii). Method is available from the Hach Company, 100 Dayton Avenue, Ames, IA 50010.

2. Appears in the Code of Federal Regulations, volume 40, parts 141.21(f)(3) and 141.21(f)(6)(iv). Method is available from IDEXX Laboratories, Inc., One IDEXX Drive, Westbrook, Main 04092.

3. Appears in the Code of Federal Regulations, volume 40, part 141.21(f)(6)(vi). Method is available from Charm Sciences, Inc., 36 Franklin Street, Malden, MA 02148-4120.

METHOD DESCRIPTIONS & ANALYTE CODES MICROBIOLOGY

(Table 2)

<u>Group of Analytes</u>	<u>ELAP/EPA Analyte Codes</u>	<u>NELAP Analyte Codes</u>	<u>Method Description*</u>	<u>Reference Method</u>
HPC				
<i>Heterotrophic Plate Count</i>				
heterotrophic bacteria	0258	same	HPC	SM9215B ⁴
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Notations:				

* The method descriptions must not contain spaces, hyphens, slashes, or commas.

4. Method is the same for either drinking water or wastewater matrix.

METHOD DESCRIPTIONS & ANALYTE CODES MICROBIOLOGY

(Table 3)

<u>Group of Analytes</u>	<u>ELAP/EPA Analyte Codes</u>	<u>NELAP Analyte Codes</u>	<u>Method Description*</u>	<u>Reference Method</u>
DRINKING WATER SOURCE ("SOURCE WATER") ⁵				
<i>Multiple Tube Fermentation (or "Fermentation") Methods:</i>				
Total Coliform	0252		MTFLT B	SM9221B
Fecal Coliform	0253		MTFEC	SM9221C,E
Fecal Coliform	0253		MTFA1	SM9221E

<i>Membrane Filtration (or "Filtration") Methods:</i>				
Total Coliform	0250		MFmENDO	SM9222B
Fecal Coliform	0251		MFmFC	SM9222D

<i>Chromogenic-Fluorogenic Methods Involving Membrane Filtration:</i>				
Total Coliform	0250		MI	EPA/600/J-99/225

<i>Chromogenic-Fluorogenic Methods Involving Single or Multiple Tube Processes:</i>				
Total Coliform	0256		ColilertMTF	SM9223
Total Coliform	0256		ColilertQT	SM9223
Total Coliform	0256		Colilert18MTF	SM9223
Total Coliform	0256		Colilert18QT	SM9223
=====				

Notations:

The method descriptions must not contain spaces, hyphens, slashes, or commas.

5. Laboratories may analyze wastewater PT study samples with the methods indicated for this category of testing.

METHOD DESCRIPTIONS & ANALYTE CODES MICROBIOLOGY

(Table 4)

<u>Group of Analytes</u>	<u>ELAP/EPA Analyte Codes</u>	<u>NELAP Analyte Codes</u>	<u>Method Description*</u>	<u>Reference Method</u>
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WASTEWATER MATRIX

Multiple Tube Fermentation (or "Fermentation") Methods:

Total Coliform	0252	0234	MTFLT B	SM9221B
Fecal Coliform	0253	0236	MTFEC	SM9221C,E
Fecal Coliform	0253	0236	MTFA1	SM9221E

Membrane Filtration (or "Filtration") Methods:

Total Coliform	0250	0233	MFmENDO	SM9222B
Fecal Coliform	0251	0235	MFMFC	SM9222D

NOTATION:

The method descriptions must not contain spaces, hyphens, slashes, or commas.